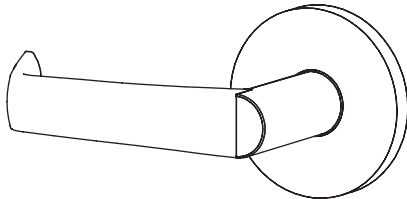
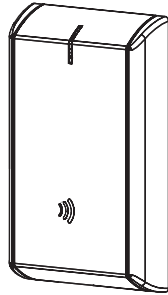


SARGENT®

ASSA ABLOY



WiFi

Mortise Lock

Installation Instructions

A8151D
03/15

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ASSA ABLOY, the global leader
in door opening solutions

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1 Warning

Changes or modifications to this device not expressly approved by ASSA ABLOY could void the user's authority to operate the equipment.

FCC:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Industry Canada:

This Class B digital apparatus meets all requirements of the Canadian Interference Causing Equipment Regulations. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Cet appareillage numérique de la classe B répond à toutes les exigences de l'interférence canadienne causant des règlements d'équipement. L'opération est sujette aux deux conditions suivantes: (1) ce dispositif peut ne pas causer l'interférence nocive, et (2) ce dispositif doit accepter n'importe quelle interférence reçue, y compris l'interférence qui peut causer l'opération peu désirée. "This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter."

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.



Any retrofit or other field modification to a fire rated opening can potentially impact the fire rating of the opening, and SARGENT Manufacturing makes no representations or warranties concerning what such impact may be in any specific situation. When retrofitting any portion of an existing fire rated opening, or specifying and installing a new fire-rated opening, please consult with a code specialist or local code official (Authority Having Jurisdiction) to ensure compliance with all applicable codes and ratings.



To avoid possible damage from electrostatic discharge (ESD), some basic precautions should be used when handling electronic components:

- Minimize build-up of static by touching and/or maintaining contact with unpainted metal surfaces such as door hinges, latches, and mounting plates especially when mounting electronic components such as readers and controllers onto the door.
- Leave components (reader and controller) protected in their respective anti-static bags until ready for installation
- Do not touch pins, leads or solder connections on the circuit boards

2 General Description

The IN120 WiFi lock offers the ease and flexibility of WiFi in a streamlined design, setting a new standard for aesthetics and performance. The IN120 uses IEEE 802.11 WiFi communication and a flexible feature set for easier, more cost-effective installations, allowing facilities to leverage their IT infrastructure to expand access control coverage to more doors. Featuring HID® multiCLASS SE® technology, it supports heightened identity security and multiple credentials, including NFC-enabled mobile phones.

This product is operated by six (6) “AA” alkaline batteries, or can be hard-powered using an optional 12-24VDC power supply connected by a harness through the door. SARGENT mortise locks are designed with quality components to provide high security, performance and durability.

3 Hardware Specifications

- Complete lockset with on-board memory
- ADA compliant
- Easily retrofits existing door preps (mortise)
- Latch - Stainless steel
- Optional deadbolt - Hardened steel
- Guardbolt - Stainless steel, non handed
- Handing (RH/RHR/LH/LHR) must be specified, but is easily field-reversible without opening the lock case
- Case - 12 gauge heavy duty wrought steel
- Cylinder retracts latchbolt (and deadbolt)
- Inside lever retracts latch and deadbolt simultaneously
- Lock furnished for 1-3/4” doors. For other thicknesses, consult factory.
- UL Listed (3 hr.)
- Outside lever controlled by any combination of contactless reader or mechanical cylinder

4 Electronic Specifications

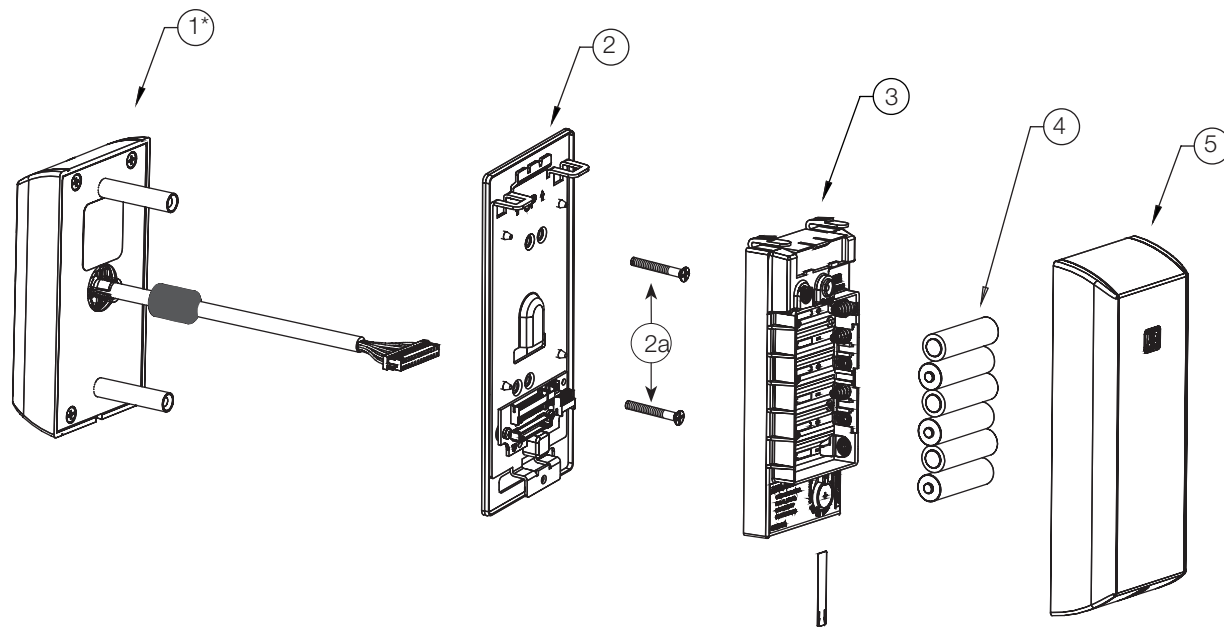
- Input Power: DC 9V, 1.5A (6 AA alkaline batteries)
- Optional hard-power 12VDC to 24VDC
- HID® multiCLASS SE® technology offers support for the following credentials:
 - High Frequency (13.56 MHz):
 - HID iCLASS®
 - HID iCLASS SE® (SIO-enabled)
 - HID iCLASS® Seos™
 - HID MIFARE® SE
 - HID DESfire® EV1 SE
 - MIFARE Classic
 - DESfire EV1
 - FeliCa
 - Low Frequency (125 kHz):
 - HID Prox®
- WiFi (IEEE 802.11 b/g/n)
- Multiple time zone and holiday access scheduling
- First-in unlock or automatic unlock configuration, based on specified time schedule
- Support for most advanced wireless encryption and authentication standards such as WEP, WPA, WPA2 and 802.1x*
- 2,400 users per lock; 10,000 event audit trail
- Privacy button
- 8200 lock body offers monitoring of deadbolt REX and provides integrated monitoring of door position

*For specific security information, please contact your local ASSA ABLOY Door Security Solutions sales consultant or call 800-810-WIRE.



To comply with “Fire Listed” doors, the batteries must be replaced with alkaline batteries only.

5 Parts Breakdown



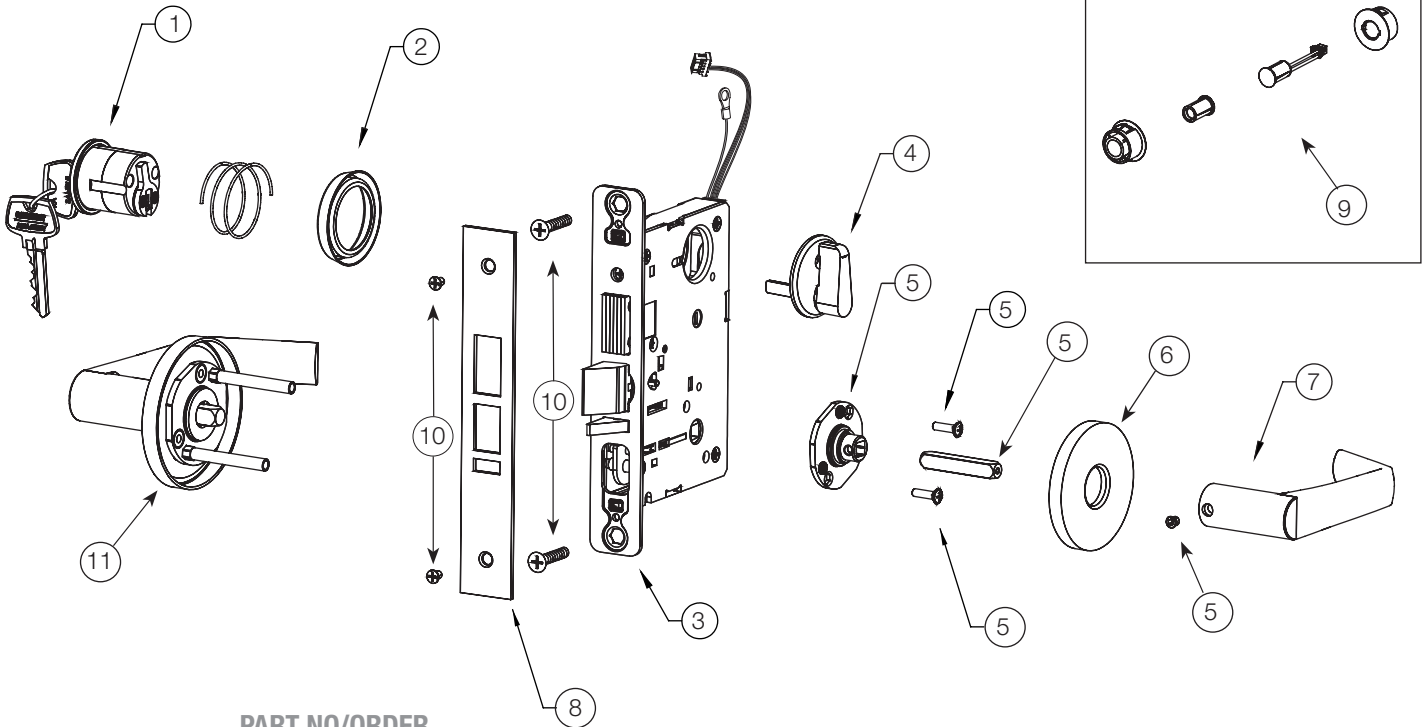
ITEM	PART NO./ORDER STRING	DESCRIPTION	QTY.
1	IN-EM01-IPS-B	Reader assembly - black plastic	1
	IN-EM01-IPS-W	Reader assembly - white plastic	
	IN-EM01-CP-B	Reader assembly - FeliCa - black plastic	
	IN-EM01-CP-W	Reader assembly - FeliCa - white plastic	
	IN-EM01-IPS-MB-xx*	Reader assembly - black metal	
	IN-EM01-IPS-MW-xx*	Reader assembly - white metal	
	IN-EM01-CP-MB-xx*	Reader assembly - FeliCa - black metal	
	IN-EM01-CP-MW-xx*	Reader assembly - FeliCa - white metal	
2	IN-120-EM04	Mounting plate assembly	1
2a		Through-bolts (#8-32 x 1 1/4")	2
3	IN-120-EM03	Controller assembly	1
4	N/A	AA battery	6
5	IN-EM02-B	Battery cover assembly - black plastic	1
	IN-EM02-W	Battery cover assembly - white plastic	
	IN-EM02-MB-xx*	Battery cover assembly - black metal	
	IN-EM02-MW-xx*	Battery cover assembly - white metal	

* Specify finish

Tools Required:

- #2 Phillips screwdriver
- Flat head
- T20 Torx® driver
- Security allen wrench (provided)

5 Parts Breakdown (Continued)



ITEM	PART NO/ORDER STRING	DESCRIPTION	QTY
1	Consult Factory	#41 Mortise cylinder	1
2	13-2131	97 Ring	1
3	IN-120-7976-hand-fin	Lock body with deadbolt with cylinder	1
	IN-120-7977-hand-fin	Lock body with deadbolt without cylinder	
	IN-120-7978-hand-fin	Lock body without deadbolt with cylinder	
	IN-120-7979-hand-fin	Lock body without deadbolt without cylinder	
	IN-120-82276-hand-fin*	Lock body with deadbolt with cylinder (not shown)	
	IN-120-82277-hand-fin*	Lock body with deadbolt without cylinder (not shown)	
	IN-120-82278-hand-fin	Lock body without deadbolt with cylinder (not shown)	
	IN-120-82279-hand-fin	Lock body without deadbolt without cylinder (not shown)	
4	77-4081	130W Turn lever	1
5	79-2162	Trim pack	1
6	Consult Factory	Rose	
7	Consult Factory	Inside lever	1
8	79-0035	Without deadbolt	1
	79-0036	With deadbolt (shown)	
9	52-5373	Door Position Switch (DPS) pack	1
10	77-4236	Mortise screw pack - specify finish (includes: wood and metal lock body screws, faceplate screws, and strike screws)	1
11	Consult Factory	Outside trim	1
12	A8150	Field prep template (not shown)	1
13	4713	Door manufacturers template (not shown)	1
14	A8151	Instructions (this manual)	1

*Required for Escape Return functionality (a residential requirement in Canada)

6 Lock Installation

1 Prepare Door

A. Verify Hand and Bevel of Door

Stand on outside of locked door when determining door hand.

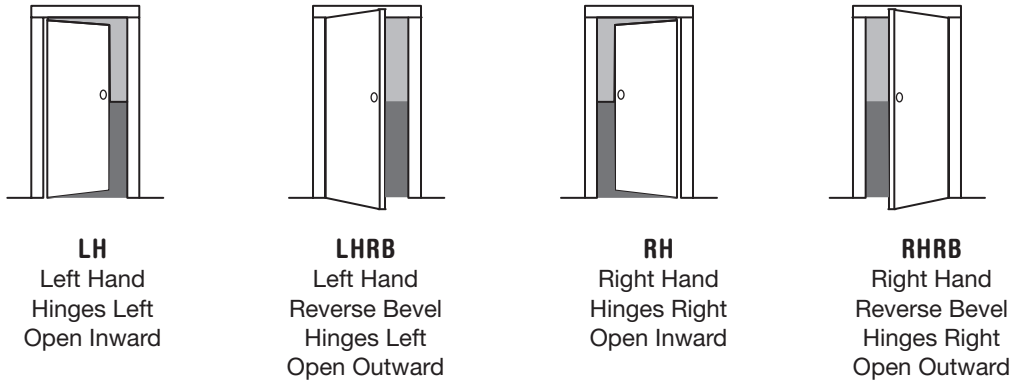


Fig. 1A

B. Door Preparation

Prior to installation, all holes must be free of burrs, debris and sharp edges.

Prepare door according to appropriate template (see website www.intelligentopenings.com).

- Field Template: A8150 (ships with product)
- Door Manufacturer's Template: 4713

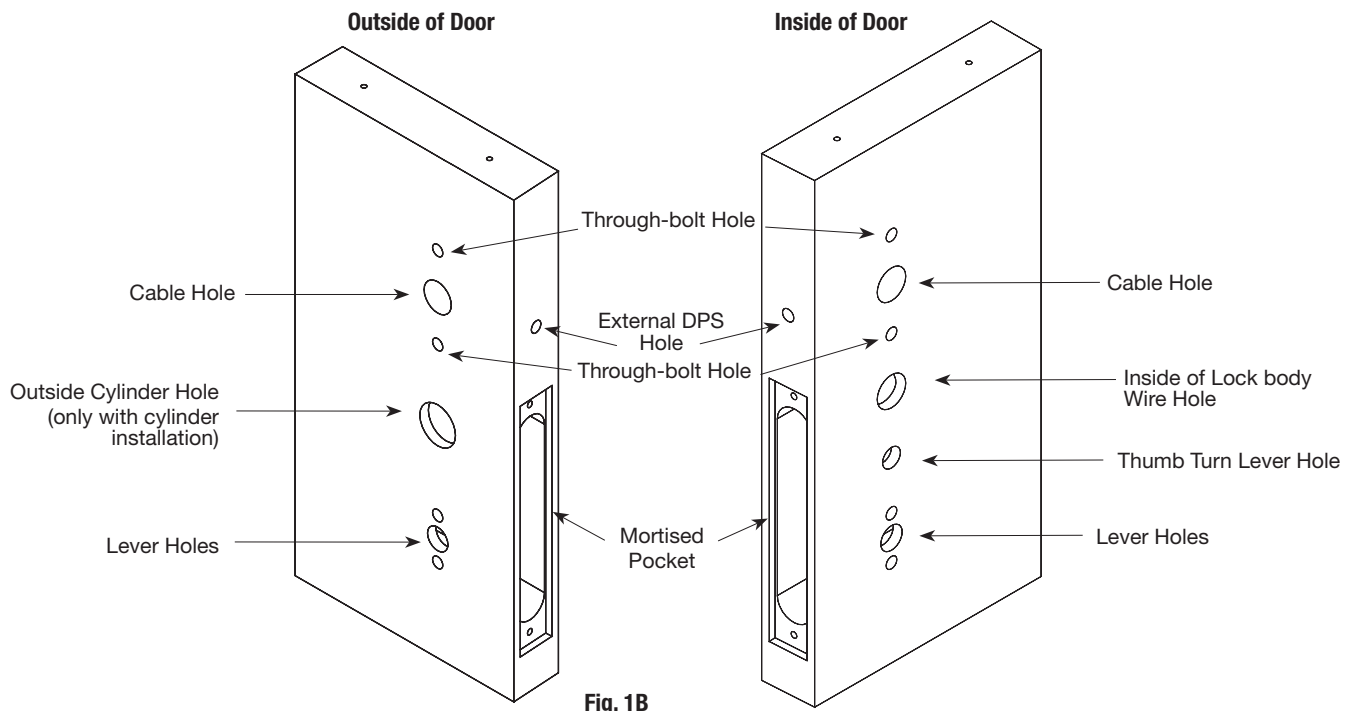


Fig. 1B

2 Prepare Lock Body

A. Reverse Lock Hand (If Required)

1. Position lock body so that red surface of locking piece is visible.
2. Insert blade type screwdriver into locking piece slot to rotate locking piece.
3. Push locking piece toward the back of the lock body and rotate the locking piece 180°.

Note: Red indicates locked (outside) side.

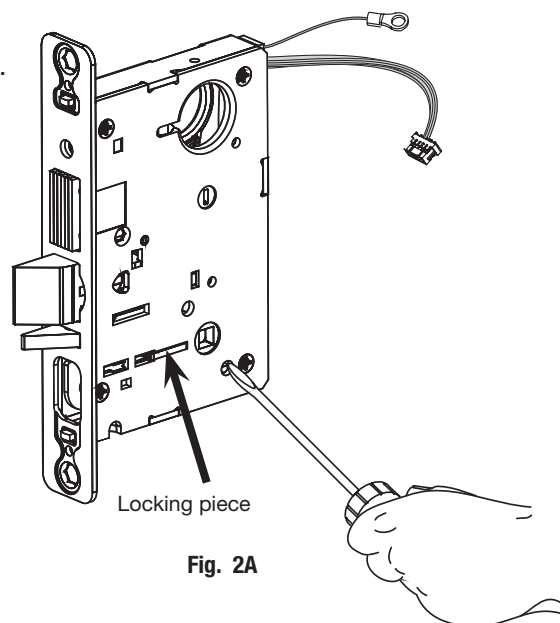


Fig. 2A

B. Reverse Latch Hand (If Required)

4. Rotate the latchbolt 180° (Fig. 2B).
5. Flip deadlatch by hand to match bevel of latchbolt.

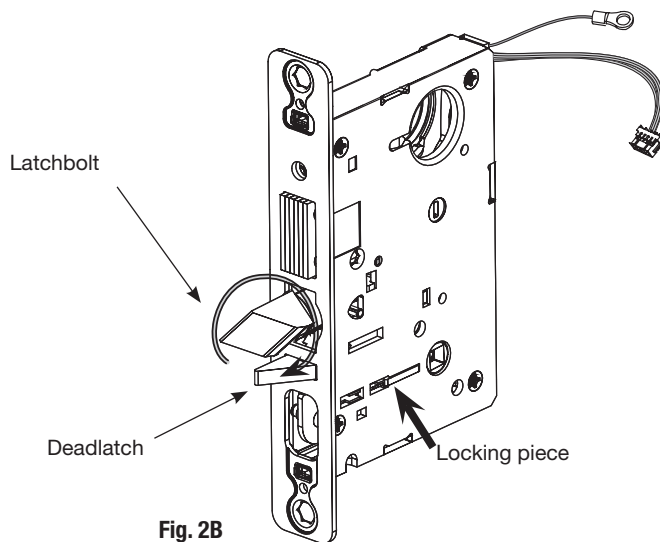


Fig. 2B

3 Install Door Position Switch (DPS)

1. Push wires through raceway toward lock prep.
2. Push DPS firmly into place by hand.
Note: **DO NOT TAP SWITCH WITH ANY TOOL.**
3. Install magnet into door frame. Push firmly into place by hand.
See instruction A7983A.

* Only required with the 7900 lock body - 8200 has an integrated DPS

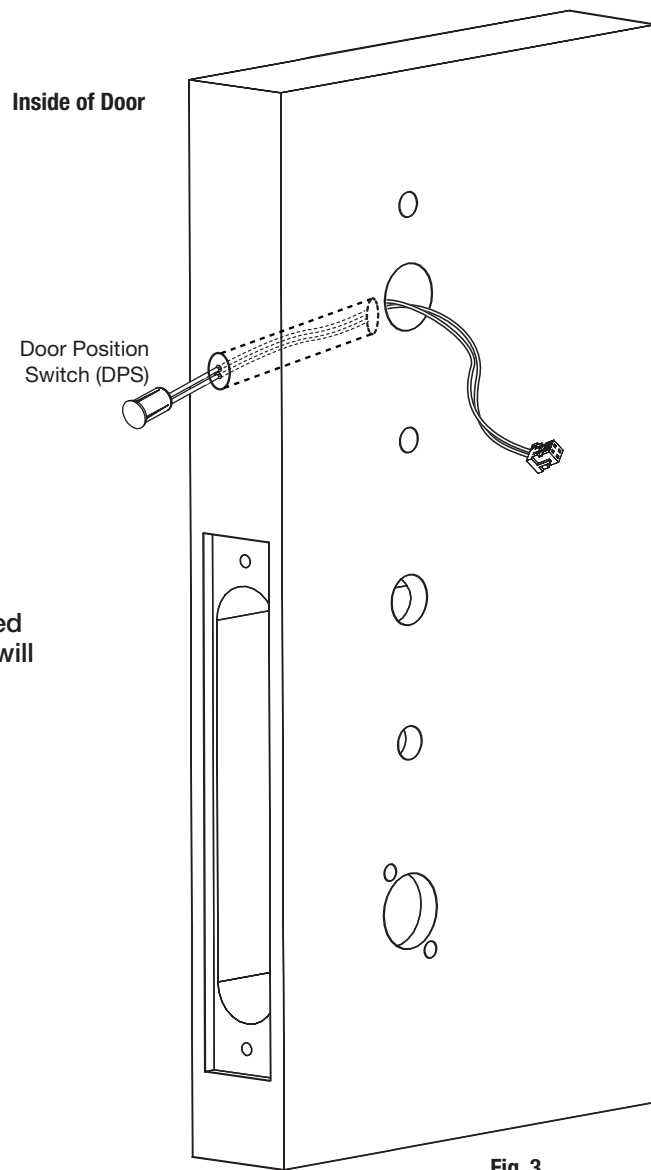


Fig. 3

CAUTION: if DPS is not installed or is installed improperly, door status monitoring features will not function.

4 Install Lock Body

Note: Do not pull the lock into the pocket using the harness alone.

Ensure that the wire harness is not pinched between the lock and the mortise pocket.

1. Feed the wire harness into the mortise pocket and through inside preparation hole as depicted in Figure 4.
2. Carefully push the lock body into the pocket while lightly applying tension to the wire harness.

3. Insert (2) #12-24 screws into the lock body (Fig. 4) and tighten* with a screw driver.

*Do not fully tighten until cylinder and levers are installed and properly aligned.

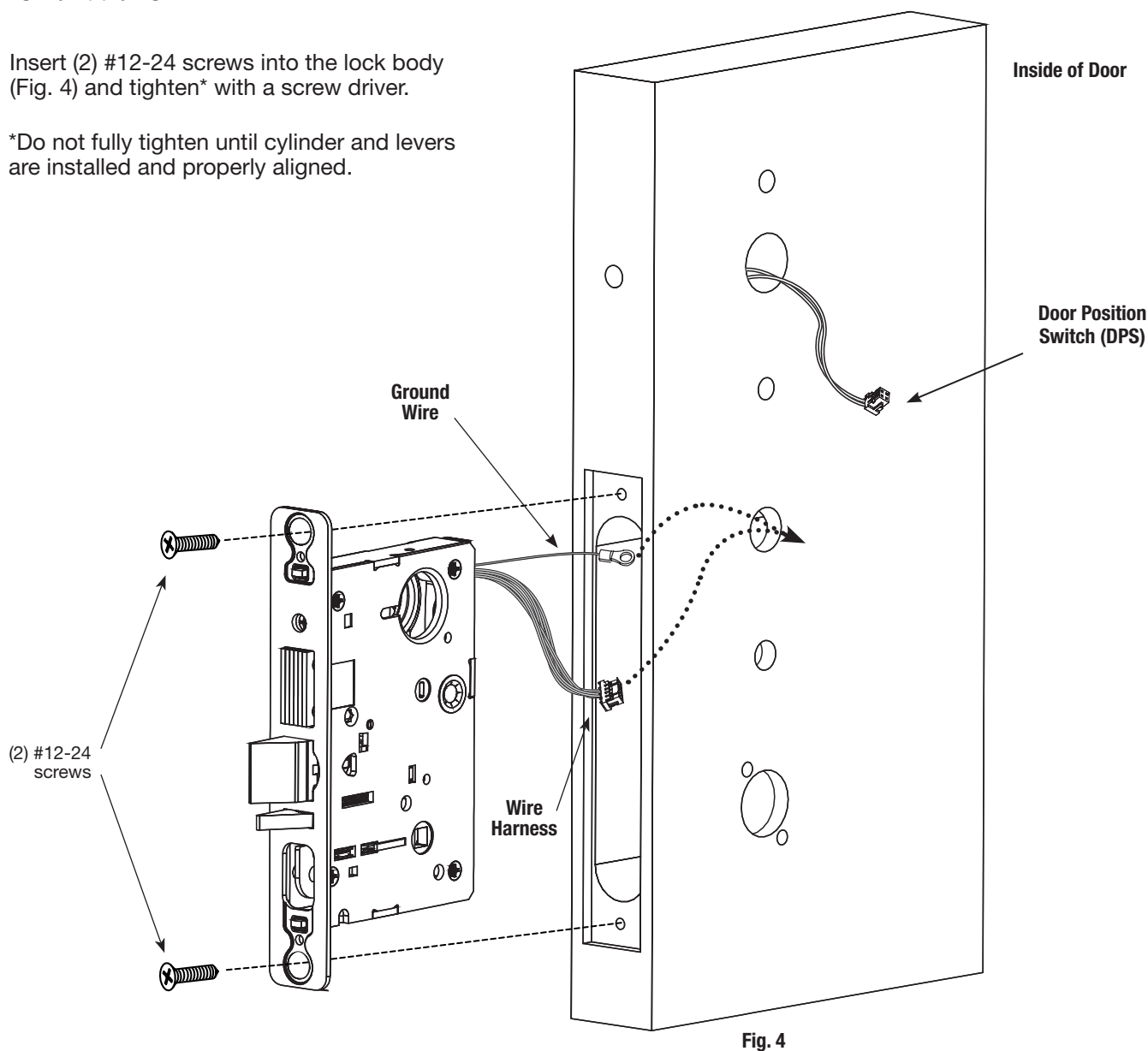


Fig. 4

5 Outside Cylinder Installation

1. Slide the spring and the rosette onto the cylinder.
2. Rotate the cylinder into cylinder hole with fingers.
3. Insert key 75% of the way and utilize the key to rotate the cylinder into the rest of the cylinder hole.
Note: Do not attempt to tighten all the way.
4. Verify that orientation of cylinder has the SARGENT logo as depicted in Fig. 5A.
5. Hand tighten the cylinder clamp screw with Phillips screwdriver to prevent unscrewing of the cylinder (Fig 5C).
6. Test cylinder function:
 - Key retracts latchbolt and deadbolt (7976 function).
 - Key retracts latchbolt (7978 function).
 - Cylinder not present for 7977 and 7979 functions.

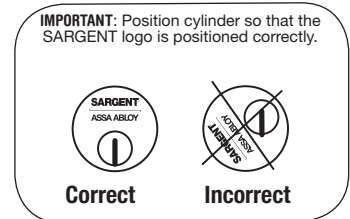
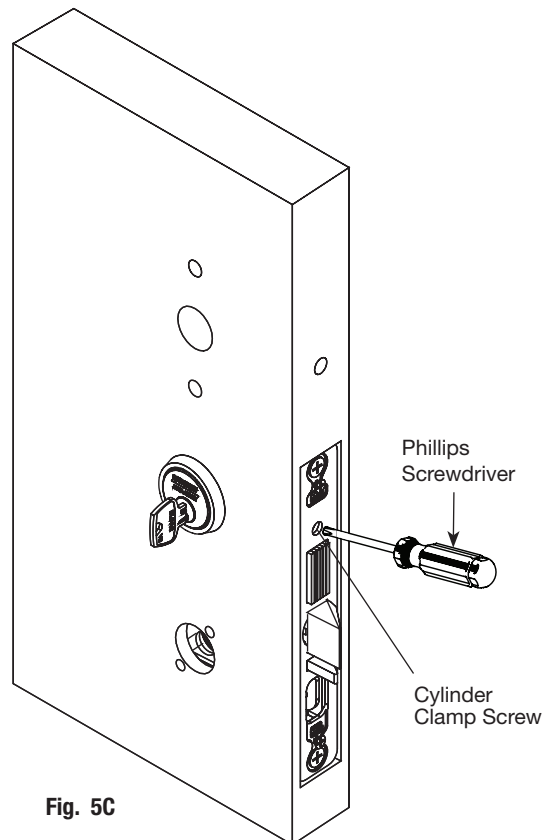
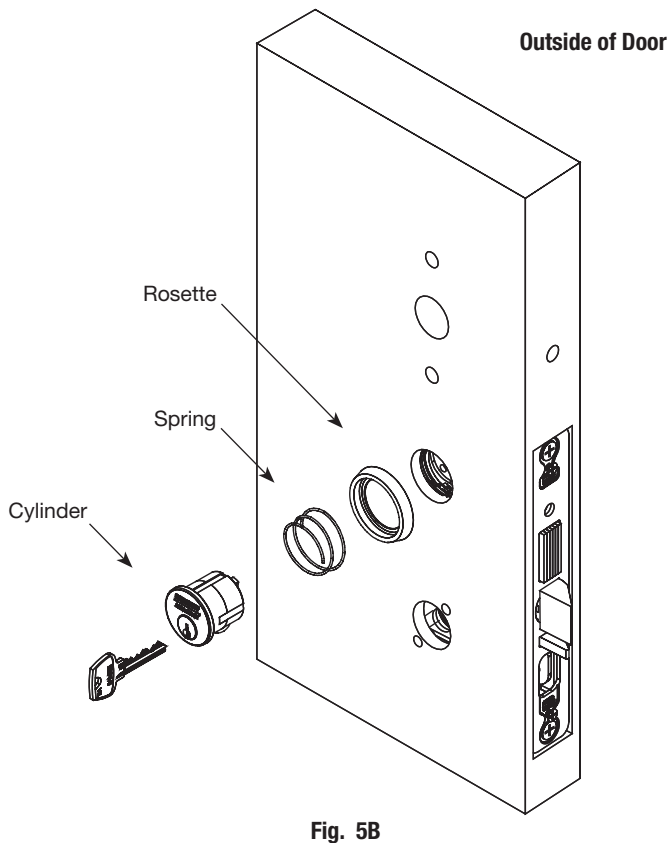


Fig. 5A



6 Assemble Outside Trim

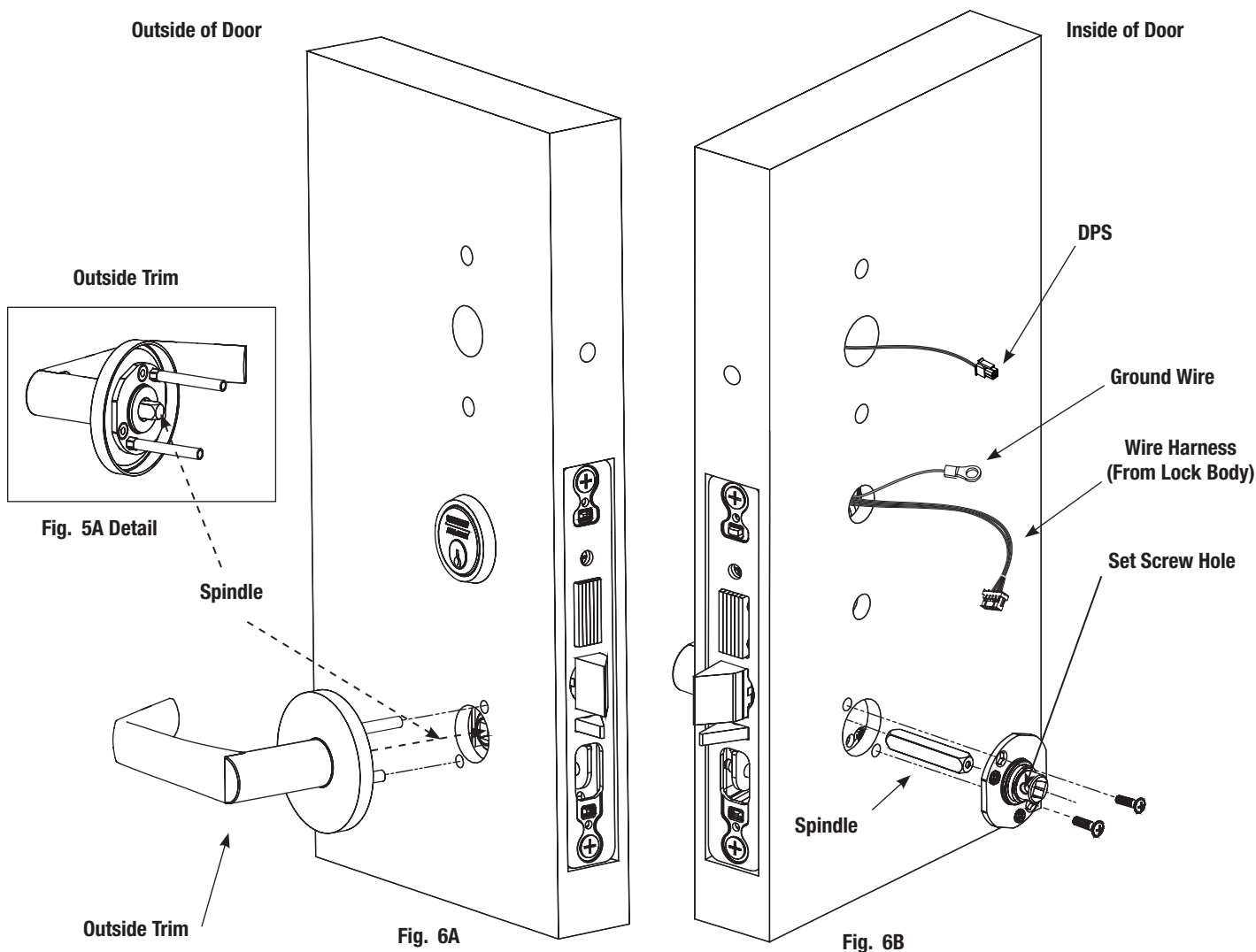
1. With outside lever horizontal, insert the mounting posts through outside of door and lock body.

Make certain the lever spindle is properly engaged inside the lock body (Fig 6A).

2. On the inside of the door, insert spindle into square hole of mortise lock (Fig 6B).

3. Slide inside adapter and plate assembly over spindle and secure with (2) 8-32 X 5/8" Phillips oval head and lock washer machine screws.

Note: Ensure that position of set screw hole on inside adapter is oriented to match location of hole in inside lever handle.



7 Install Inside Rose and Inside Lever Assembly

1. Place inside rose flush against door surface and rotate first counter-clockwise to seat the threads, then clockwise to securely tighten.
2. Slide lever onto spindle until fully seated. Be sure handle is horizontal and facing the hinge side of the door. Push lever onto spindle so minimum gap is visible.
3. Tighten the set screw securely with a T20 Torx® driver.
4. Finish securely tightening (2) #12-24 lock body screws.
5. Before closing the door, test that the lever is functional and ensure smooth operation of the latchbolt.

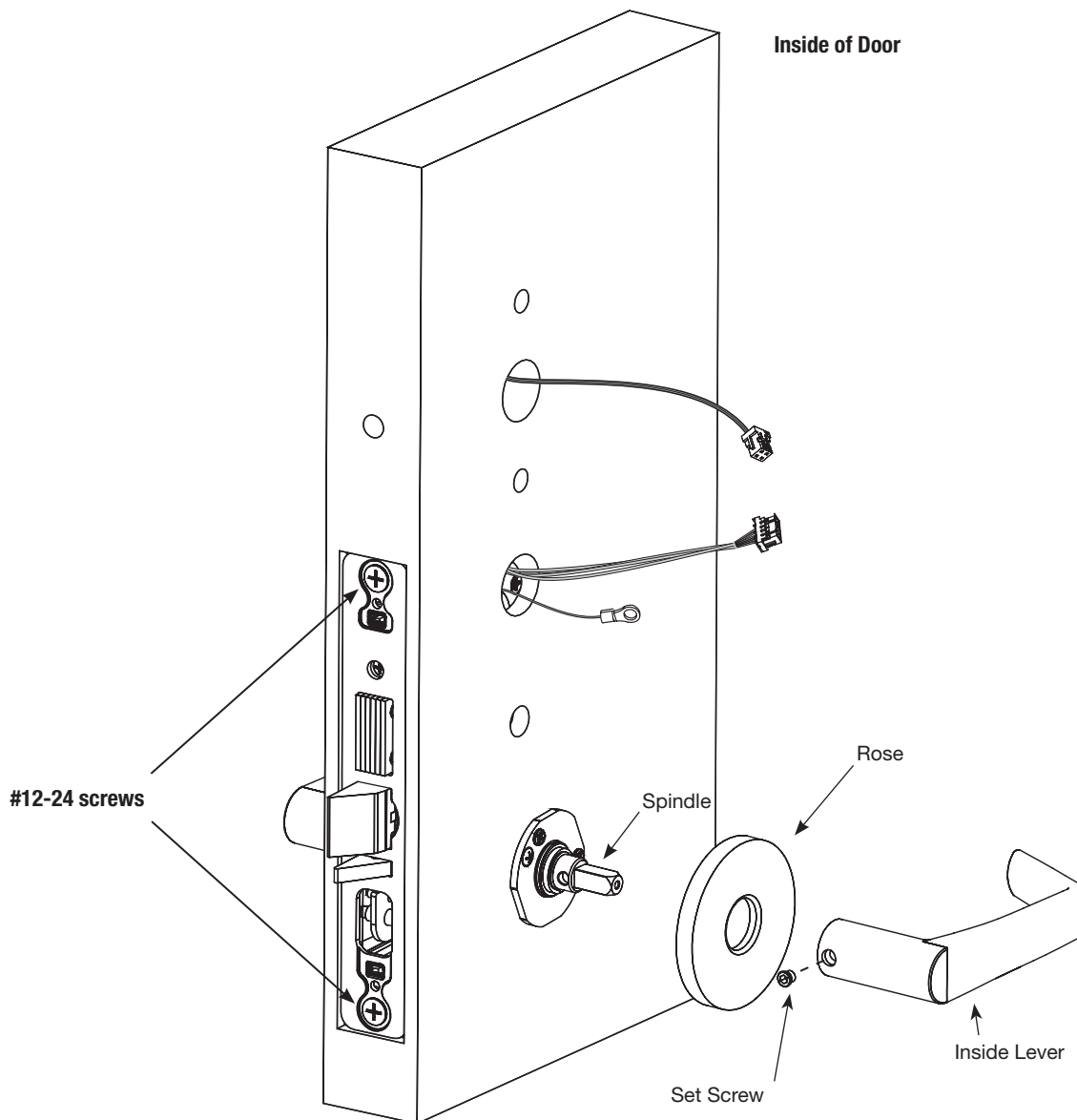
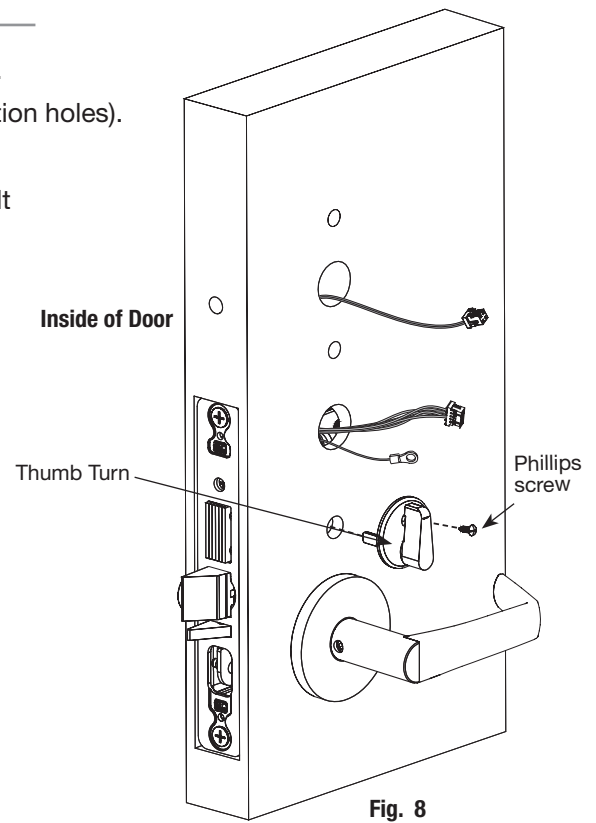


Fig. 7

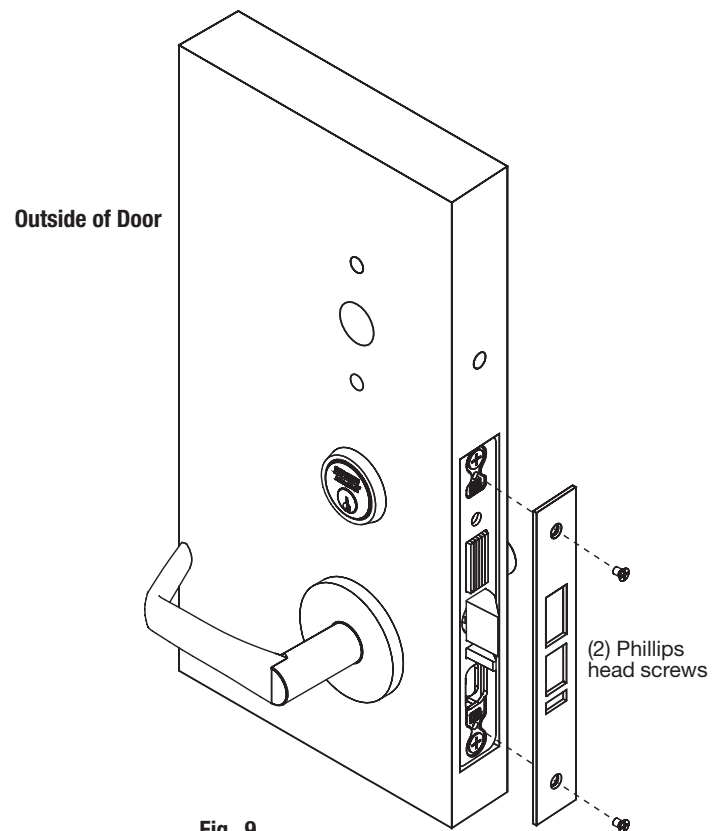
8 Install Thumb Turn

1. Insert thumb turn into preparation hole and engage slot in lock body.
2. Orient mounting plate so screw hole is vertical (aligned with preparation holes).
3. Secure plate with Phillips screw provided.
4. Test thumb turn for function by retracting and projecting the deadbolt (7976 and 7977 functions only).



9 Attach Front Plate

Attach front plate with (2) Phillips head screws.



10 Outside Reader Installation

1. Orient the reader so the LED lens is at the top.
2. Feed the cable/connector through the door (from outside to inside).
3. Install the reader to the outside of door by aligning the mounting posts with the door preparation holes. Hold the reader flush against door while ensuring proper alignment.

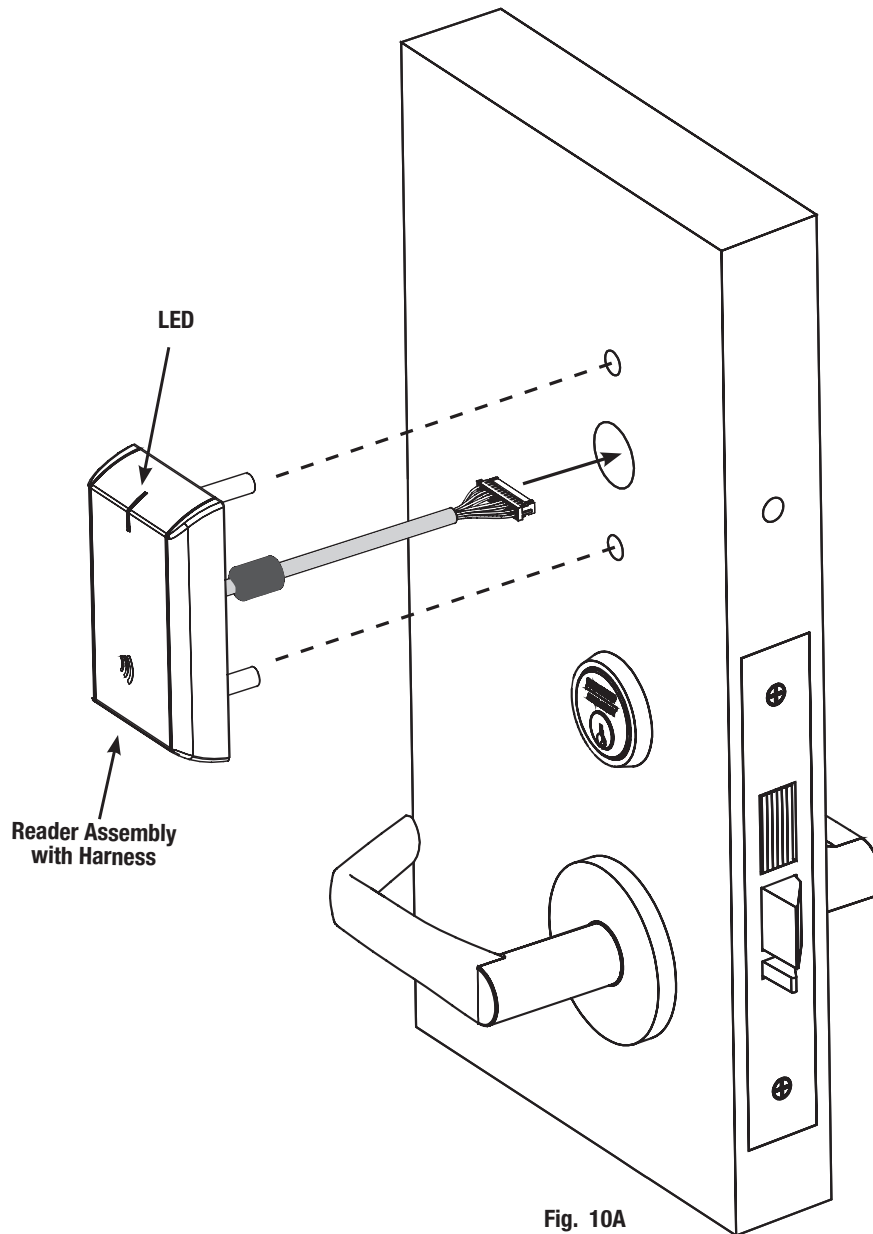


Fig. 10A

10 Outside Reader Installation (Continued)

4. Next feed the cables/connectors through the inside mounting assembly (and gasket if required*).

NOTE: Cable lengths exaggerated for illustrative purposes.

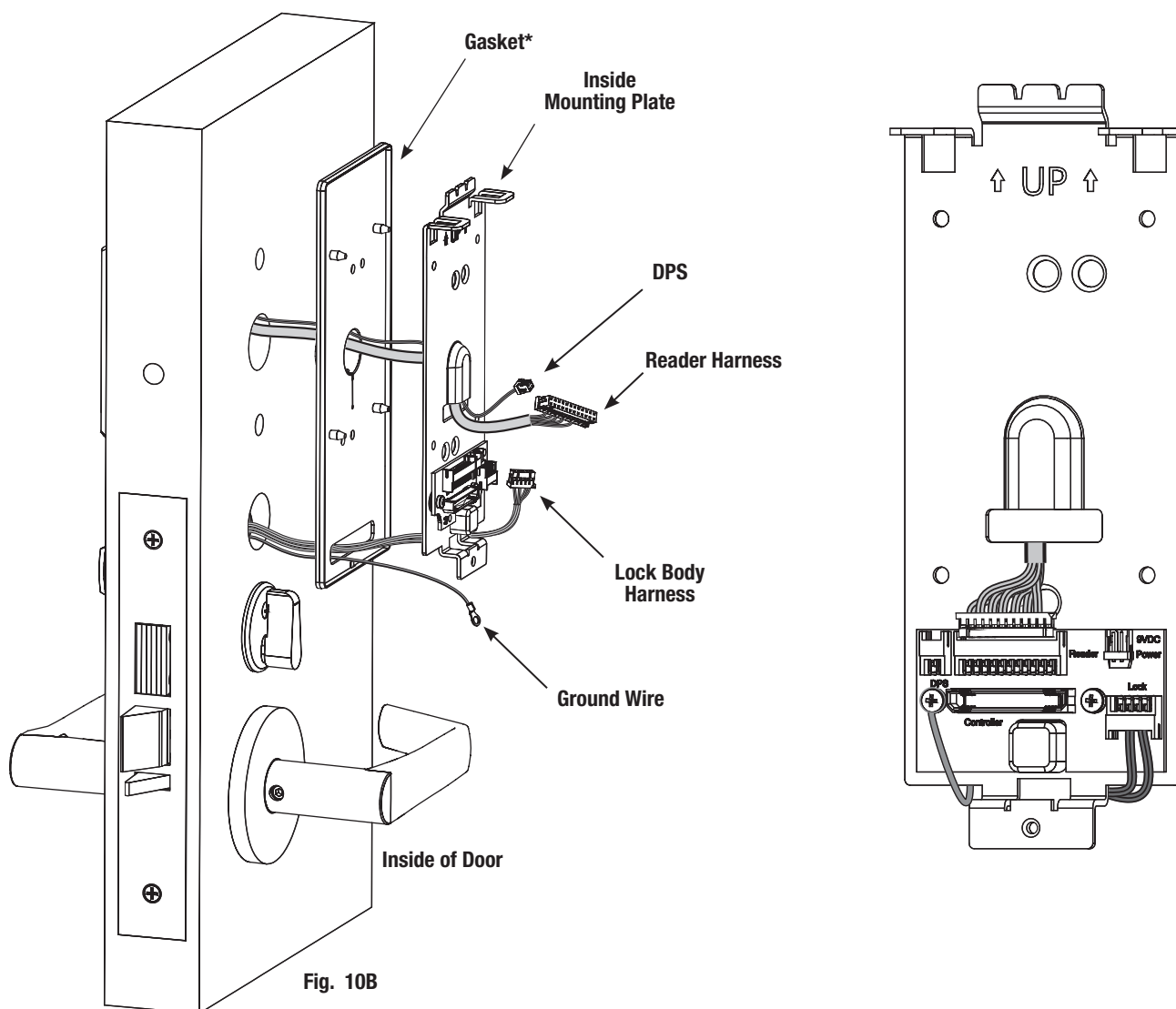


Fig. 10B

*Gasket is required for outdoor installations.

If installing with gasket; separate gasket from mounting plate to feed cables/connectors through holes as indicated (Fig. 10B).

Once cables/connectors are fed through, reattach gasket to mounting plate.

10 Outside Reader Installation (Continued)

5. Installation of Connectors

CAUTION - Do not touch or allow debris to enter connector contacts.

Secure the following connectors to their respective terminals (Fig. 10C,D):

- Secure the 24-pin card reader connector.
- Secure the 4-pin DPS connector.
- Secure the 10-pin lock body assembly connector.
- Secure ground lug to #6-32 machine screw (Fig. 10D).

*NOTE: Optional 2-pin external 9-24VDC power connector.

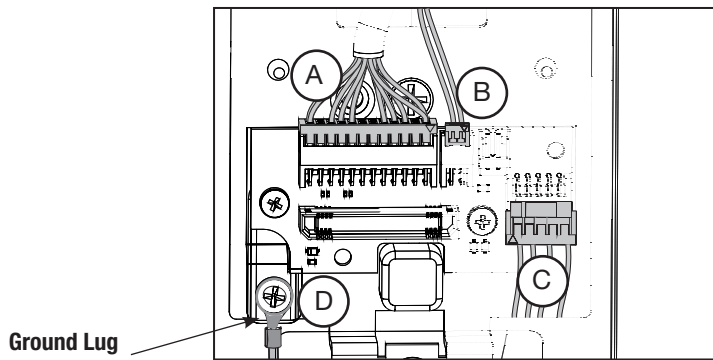


Fig. 10D

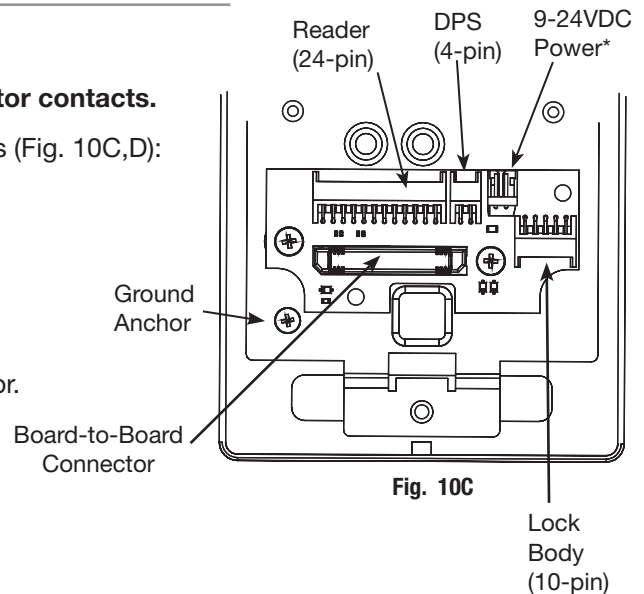


Fig. 10C

6. Secure Mounting Plate

- When all connections have been made, tuck ferrite bead and excess cable into wire hole on inside of door.
- Secure the mounting assembly while ensuring proper alignment of outside reader and tighten the (2) through-bolts on the inside of the door to secure the reader (Fig. 10E).

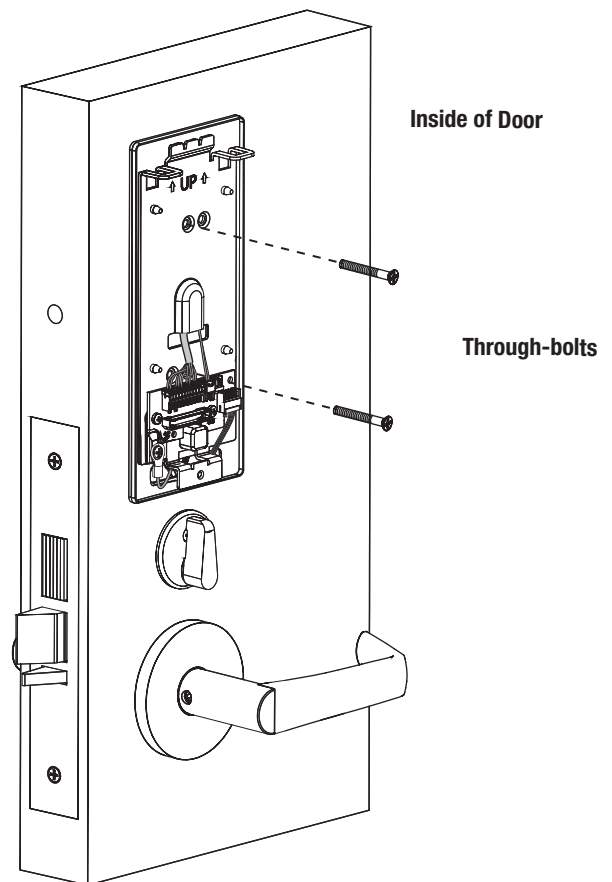
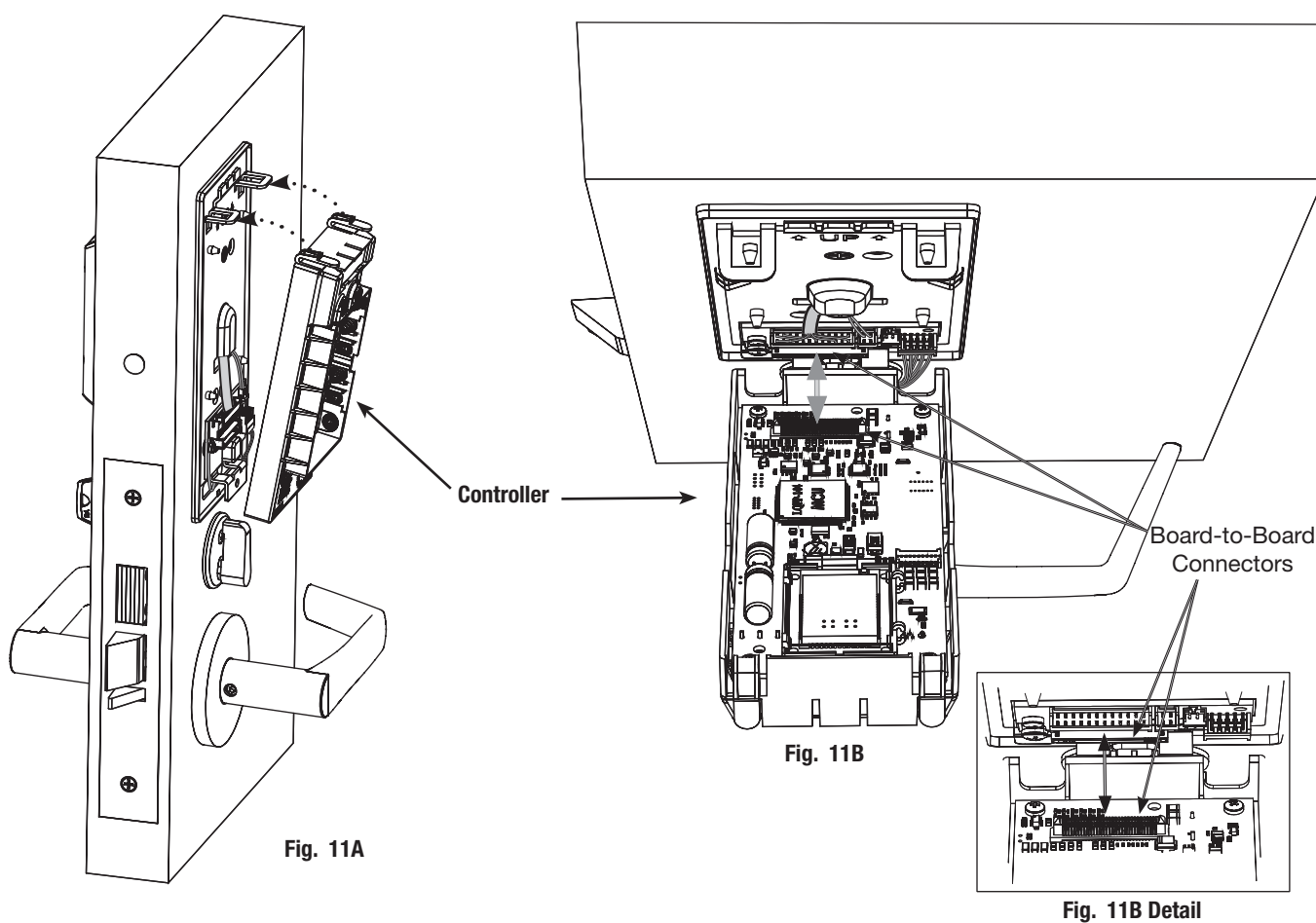


Fig. 10E

11 Installing the Controller

1. Insert bottom tab of controller into slot on mounting plate (Fig. 11A, B).
2. Looking down from top of controller, ensure proper alignment of board-to-board connectors (Fig. 11B) while pivoting controller toward door until two tabs on top snap securely into place on mounting plate (Fig. 11A).

CAUTION: To avoid possible damage to board-to-board connectors, care should be taken when securing controller to mounting plate. If there is resistance when securing, detach controller to determine cause before re-attaching controller.



12 Battery Installation

Before installing batteries for the first time:

Remove pull tab from its position beneath the coin cell by pulling on tab in direction of arrows printed on tab (Fig. 12).

1. Place (6) "AA" alkaline batteries in the compartment, being careful to align polarity properly.
2. After batteries are installed, there is a slight delay; then an audible "beep" will sound and the lock motor will cycle.

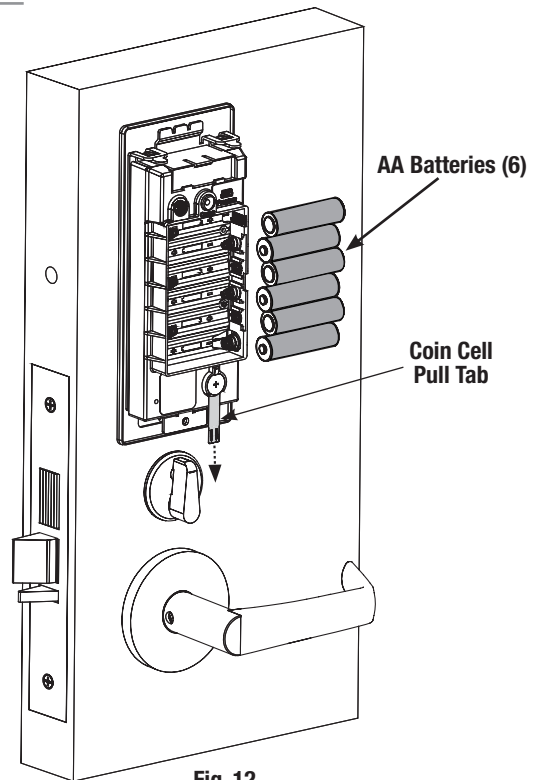


Fig. 12

13 Inside Cover Installation

1. Assemble cover by hooking top edge on inside mounting plate.
2. Carefully press bottom of cover toward door without pinching any wires.
3. Secure the cover utilizing the security allen wrench provided.

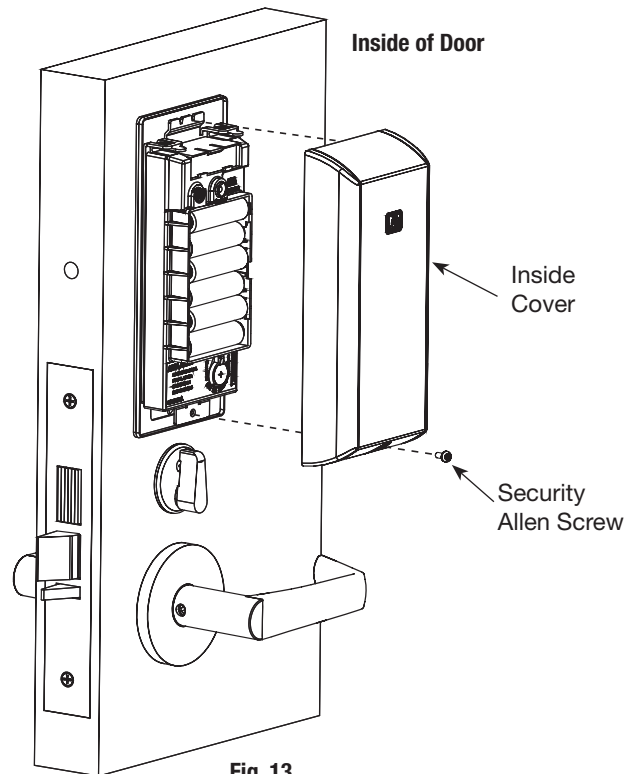


Fig. 13

7 Operational Check

For 7976- and 7978-function mortise locks with cylinders:

1. Insert key into cylinder and rotate.
There should be no friction against lock case, wire harness or any other obstructions.
2. Check that the key retracts the latch: the key should rotate freely.
3. Throw the deadbolt (if present): Check that the key retracts both the deadbolt and the latch.
4. Try the inside lever:
Ensure it retracts latch and deadbolt (if installed).
5. Use a valid credential* set up with the **Lock Configuration Tool** to unlock outside lever and retract latch.

Refer to **Network and Lock Configuration Tool** user manual (**WFMN1**) for information on how to configure and program locks.

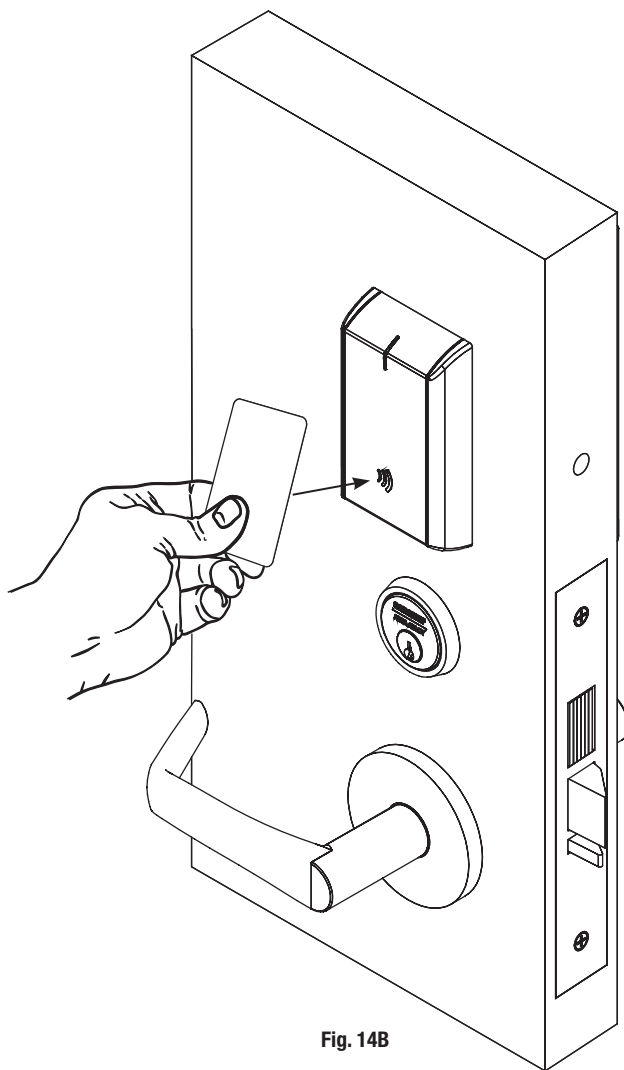


Fig. 14B

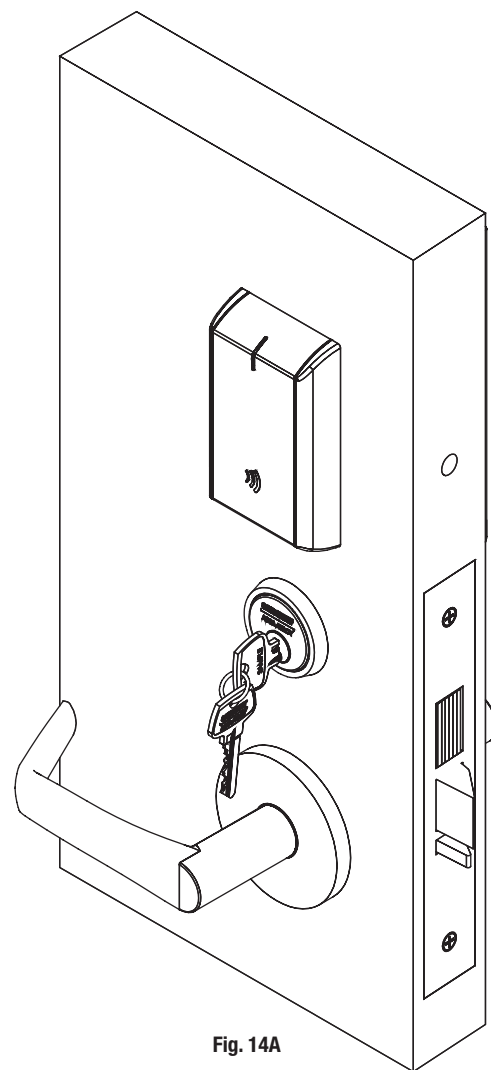


Fig. 14A

*Twenty (20) seconds after lock initialization (single beep with lock motor actuation).

Note: The credential should approach the inscription on the reader as indicated (Fig. 14B) to ensure that the credential is read properly.

Do not wave credential.



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Founded in the early 1800s, SARGENT® is a market leader in locksets, cylinders, door closers, exit devices, electro-mechanical products and access control systems for new construction, renovation, and replacement applications. The company's customer base includes commercial construction, institutional, and industrial markets.

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